Author Index

A

Adee, R. R.: Subcellular Identification of Exogenous Particles by High-Voltage Electron Microscopy. Nov. p. 507
Adrian, Horace F.: Use of Pest Control Chemicals in Texas. July p. 320
Akland, Gerald: Relationship between Viable Bacteria and Air Pollutants in an Urban Atmosphere. Apr. p. 164
Anderson, Michael P.: Determination of Lead in Untreated Urine by the Delves Cup System. July p. 310
Ashe, H. B.: A Monumental Study—Reconstruction of a 1920 Granite Shed. May p. 206
Astill, B. D.: Exposure of Man and Dog to Low Concentrations of Acetone Vapors. Aug. p. 329
Ayer, H. E.: A Monumental Study—Reconstruction of a 1920 Granite Shed. May p. 206
Azar, A.: Blood Levels of Fluorocarbon Related to Cardiac Sensitization. Mar. p. 102

B

Balmer, Karin: Determination of Trichloroacetic Acid in Urine by a Gas Chromatographic Method. Mar. p. 93
Barth, Mary L.: Phenobarbital and Organic Solvent Toxicity. Nov. p. 487
Bartosiewicz, Leslie: Improved Techniques of Identification and Determination of Airborne Asbestos. June p. 252
Bavely, Harold: Environmental Health Aspects of Construction of the Northfield Hydroelectric Project. Jan. p. 38
Belding, H. S.: Physiological Evaluation of the WBGT Index for Occupational Heat Stress. Sept. p. 375
Berry, Clyde M.: Lead and Cadmium Distribution in the Particulate Effluent from Coal-Fired Boilers. Sept. p. 396
Blacker, J. H.: Triethanolamine for Collecting Nitrogen Dioxide in the TLV Range. Sept. p. 390
Blair, Austin W.: Abrasive Blasting Protective Practices Study—Preliminary Survey of Results. Feb. p. 61
Blakemore, William S.; Gaseous Odorant Evaluation of a Hospital Clean Room. Aug. p. 367
Blumenthal, Warren B.: Zirconium in the Ecology. Mar. p. 128
Boettner, E. A.: Quantitative Differential Thermal Analysis of Small Dust Samples Containing Quartz. May p. 193
Bohl, C. D.: Determination of Elemental Phosphorus in Air by Gas Chromatography. July p. 306
Bovee, Harley H.: Simplified Method for the Determination of Benzo(a)pyrene in Ambient Air. Sept. p. 404
Braid, P. E.: Stability of Esterases in Stored Blood Fractions. Aug. p. 360
Breysse, Peter A.: Aircraft Noise Induced Vibration in Fifteen Residences Near Seattle-Tacoma International Airport. Oct. p. 463
Brown, John R.: Lifting as an Industrial Hazard. July p. 292
Bunsted, H. E.: Determination of Alpha-Quartz in the Respirable Portions of Airborne Particulates by X-ray Diffraction. Apr. p. 150
Burgess, William A.: A Monumental Study—Reconstruction of a 1920 Granite Shed. May p. 206
: A Carbon Monoxide-Oxygen Sampler for Evaluation of Fire Fighter Exposures. June p. 264
: The Determination of Quartz in Airborne Respirable Granite Dust by Infrared Spectrophotometry. July p. 298
Burtis, E. G.: Acute Toxicity of a Homologous Series of Branch-Chained Primary Alcohols. Nov. p. 493
Busch, K. A.: A Monumental Study—Reconstruction of a 1920 Granite Shed. May p. 206

C

Cant, Stephen M.: Aircraft Noise Induced Vibration in Fifteen Residences Near Seattle-Tacoma International Airport. Oct. p. 463
Cares, Janet W.: The Determination of Quartz in Airborne Respirable Granite Dust by Infrared Spectrophotometry. July p. 298
Cashins, Robert F.: Environmental Health Aspects of Construction of the Northfield Hydroelectric Project. Jan. p. 38
Catron, Diane L.: In Vivo Solubility of Four Forms of Barium Determined by Scanning Techniques. Aug. p. 350
Cheever, Charles L.: Lead and Cadmium Distribution in the Particulate Effluent from Coal-Fired Boilers. Sept. p. 396
Cholak, Jacob: The Determination of Cadmium in Biological and Related Material by Atomic Absorption. Oct. p. 450
Cole, Clifford F.: The Effect of Pressure, Temperature, and Volume Flow Rate Changes on Air Pollution Samplers. Apr. p. 159
Coriell, Lewis L.: Gaseous Odorant Evaluation of a Hospital Clean Room. Aug. p. 367
Corn, Morton: Comparison of Equivalent Spherical Volume and Aerodynamic Diameters for Irregularly Shaped Particles. Jan. p. 13
: Physical and Chemical Properties of Respirable Coal Dust from Two United States Mines. July p. 279
Cornish, Herbert H.: Phenobarbital and Organic Solvent Toxicity. Nov. p. 487
Crable, J. V.: Spectrophotometric Determination of Free Silica. Nov. p. 500

D

Davey, A. B. C.: Proposed Standard Methodology for the Evaluation of Silicosis Hazards. Sept. p. 409
Dement, J. M.: A Monumental Study—Reconstruction of a 1920 Granite Shed. May p. 206
Denton, M. B.: On Calibration of Cascade Impactors. Oct. p. 429
DiBerardinis, L.: A Monumental Study—Reconstruction of a 1920 Granite Shed. May p. 206
DiVincenzo, G. D.: Exposure of Man and Dog to Low Concentrations of Acetone Vapors. Aug. p. 329
Dryden, S. L.: Must Your New Plant Be Too Noisy? June p. 241
Dunsky, Irving L.: Determination of Revised Air Force Permissible Exposure Levels for Laser Radiation. June p. 235

E

Ehrner-Samuel, Harriet: Determination of Trichloroacetic Acid in Urine by a Gas Chromatographic Method. Mar. p. 93
Ettinger, Harry J.: Respirator Cartridge Filter Efficiency under Cylic- and Steady-Flow Conditions. May p. 182
: Effect of Humidity on the Aerodynamic Size Characteristics of Nonhygroscopic Aerosols. Oct. p. 440
Ewing, W. C.: In Vivo Solubility of Four Forms of Barium Determined by Scanning Techniques. Aug. p. 350

F

Ferber, B. I.: Service Lives of Respirator Cartridges versus Several Classes of Organic Vapors. Feb. p. 55
Ferguson, W. S.: Caprolactam Vapor Exposures. Sept. p. 384
Ferin, J.: The Effect of SO_2 on Lung Clearance of TiO_2 Particles in Rats. June p. 260
Fife, William A.: Determination of Revised Air Force Permissible Exposure Levels for Laser Radiation. June p. 235
Fraser, David A.: Exhaust Ventilation for Hot Processes. Nov. p. 481
Freedman, Robert W.: Service Lives of Respirator Cartridges versus Several Classes of Organic Vapor. Feb. p. 55
: Physical and Chemical Properties of Respirable Coal Dust from Two United States Mines. July p. 279

G

Gabriel, Karl L.: The Vapor Toxicity of Trimethyl Phosphite. July p. 286
Geoffrion, L. A.: Effect of Facial Hair on Respirator Performance. Apr. p. 135

Goldberg, S. A.: Bureau of Mines Procedure for Analysis of Respirable Dust from Coal Mines. May p. 200
Goldin, Abraham S.: The Determination of Quartz in Airborne Respirable Granite Dust by Infrared Spectrophotometery. July p. 298
Griffith, Franklin D.: Exposure of Japanese Quail and Parakeets to the Pyrolysis Products of Fry Pans Coated with Teflon and Common Cooking Oils. Apr. p. 176
Gunnison, Albert F.: Personal Monitoring Devices for Gaseous Contaminants. Feb. p. 78

H

Hammad, Y.: Physical and Chemical Properties of Respirable Coal Dust from Two United States Mines. July p. 279
Harris, Kathy: Relationship between Viable Bacteria and Air Pollutants in an Urban Atmosphere. Apr. p. 164
Hartstein, A. M.: Service Lives of Respirator Cartridges versus Several Classes of Organic Vapors. Feb. p. 55
: Physical and Chemical Properties of Respirable Coal Dust from Two United States Mines. July p. 279
Hatch, Theodore F.: Thermal Decomposition of Carbon Tetrachloride Vapors at Its Industrial Threshold Limit Concentration. Jan. p. 25
: Design Requirements and Limitations of a Single-Reading Heat Stress Meter. Feb. p. 66
The Pulmonary Response of Rats Exposed to the Decomposition Products of Carbon Tetrachloride at Its Industrial Limit Concentration. Feb. p. 73
: Decomposition of Phosgene in Air. Mar. p. 110
Hoover, A. Walter: Analysis of Mercury Compounds by Gas-Liquid Chromatography Utilizing and Electron Capture Detector. Aug. p. 337
Hosto, K.: Quantitative Differential Thermal Analysis of Small Dust Samples Containing Quartz. May p. 193
Hurley, R. G.: Rapid New Soft X-Ray Technique for Determination of Quartz in Coal Mine Dusts. June p. 229
Hyatt, E. C.: Effect of Facial Hair on Respirator Performance. Apr. p. 135

J

Judd, S. H.: Must Your New Plant Be Too Noisy? June p. 241

K

Kaelble, E. F.: Determination of Elemental Phosphorus in Air by Gas Chromatography. July p. 306
Kallos, G. J.: Investigation of the Formation of Bis-Chloromethyl Ether in Simulated Hydrogen Chloride-Formaldehyde Atmospheric Environments. Nov. p. 469
Klascius, Al: Microwave Radiation Hazards around Large Microwave Antenna. Mar. p. 97
Krasavage, W. J.: Dimethyl Terephthalate (DMT): Acute Toxicity, Subacute Feeding and Inhalation Studies in Male Rats. Oct. p. 455

L

Laidler, J. J.: Subcellular Identification of Exogenous Particles by High-Voltage Electron Microscopy. Nov. p. 507
Leach, L.: The Effect of SO_2 on Lung Clearance of TiO_2 Particle in Rats. June p. 260
Lee, Robert E.: Relationship between Viable Bacteria and Air Pollutants in an Urban Atmosphere. Apr. p. 164
Leroux, J.: Proposed Standard Methodology for the Evaluation of Silicosis Hazards. Sept. p. 409
Levadie, B. T. H.: A Monumental Study—Reconstruction of a 1920 Granite Shed. May p. 206
Levin, Lester: The Vapor Toxicity of Trimethyl Phosphite. July p. 286
Lew, V. C.: delta-Aminolevulinic Acid Dehydratase (ALAD) Stability in Human Blood. July p. 315
Ling, Bessie P.: Phenobarbital and Organic Solvent Toxicity. Nov. p. 487
Luxon, Stuart G.: Harmonization of Respirator Standards in Europe. Apr. p. 143
Lynch, John J.: The Determination of Quartz in Airborne Respirable Granite Dust by Infrared Spectrophotometry. July p. 298

M

Manekshaw, S.: Physical and Chemical Properties of Respirable Coal Dust from Two United States Mines. July p. 279
McClellan, R. O.: In Vivo Solubility of Four Forms of Barium Determined By Scanning Techniques. Aug. p. 350
McGarrity, Gerard J.: Gaseous Odorant Evaluation of a Hospital Clean Room. Aug. p. 367
Mehta, Kailas: Analysis of Mercury Compounds by Gas-Liquid Chromatography Utilizing an Electron Capture Detector. Aug. p. 337
Meiners, Bernard G.: The Determination of Cadmium in Biological and Related Material by Atomic Absorption. Oct. p. 450
Mesman, Brick B.: Determination of Lead in Untreated Urine by the Delves Cup System. July p. 310
Miller, Matthew: Lordosimetry: A New Technique for the Measurement of Postural Response to Materials Handling. Jan. p. 1
Mortagy, A. K.: Monitoring Performance as a Function of Work/Rest Schedule and Thermal Stress. Nov. p. 474
Moss, O. R.: Effect of Humidity on the Aerodynamic Size Characteristics of Nonhygroscopic Aerosols. Oct. p. 440
Moyers, J. L.: On Calibration of Cascade Impactors. Oct. p. 429
Mueller, P. K.: delta-Aminolevulinic Acid Dehydratase (ALAD) Stability in Human Blood. July p. 315
Mullin, L. S.: Blood Levels of Fluorocarbon Related to Cardiac Sensitization. Mar. p. 102

N

Nathan, Ira M.: Lordosimetry: A New Technique for the Measurement of Postural Response to Materials Handling. Jan. p. 1
Nix, M.; Stability of Esterases in Stored Blood Fractions. Aug. p. 360
Noweir, Madbuli H.: Thermal Decomposition of Carbon Tetrachloride Vapors at Its Industrial Threshold Limit Concentration. Jan. p. 25
: The Pulmonary Response of Rats Exposed to the Decomposition Products of Carbon Tetrachloride Vapors at Its Industrial Threshold Limit Concentration. Feb. p. 73
: Decomposition of Phosgene in Air. Mar. p. 110

O

Orheim, Robert M.: Simplified Method for the Determination of Benzo(a)pyrene in Ambient Air. Sept. p. 404
Otey, M. G.: Determination of Gaseous Fluorine in Air. Sept. p. 418

P

Paillard, A.: Proposed Standard Methodology for the Evaluation of Silicosis Hazards. Sept. p. 409
Palmes, E. D.: Personal Monitoring Devices for Gaseous Contaminants. Feb. p. 78
Patel, Dhun B.: Analysis of Mercury Compounds by Gas-Liquid Chromatography Utilizing an Electron Capture Detector. Aug. p. 337
Pell, Sidney: An Evaluation of a Hearing Conservation Program—A Five-Year Longitudinal Study. Feb. p. 82
Peterson, Norman H.: A Carbon Monoxide-Oxygen Sampler for Evaluation of Fire Fighter Exposures. June p. 264
Pfitzer, Emil A.: Thermal Decomposition Of Carbon Tetrachloride Vapors at Its Industrial Threshold Limit. Jan. p. 25
: The Pulmonary Response of Rats Exposed to the Decomposition Products of Carbon Tetrachloride at Its Industrial Threshold Limit Concentration. Feb. p. 73
: Decomposition of Phosgene in Air. Mar. p. 110
Pickett, William E.: The Effect of Varying Inlet Geometry on the Collection Characteristics of a 10-Millimeter Nylon Cyclone. Oct. p. 421
Pritchard, J. A.: Effect of Facial Hair on Respirator Performance. Apr. p. 135
Prpic-Majic: delta-Aminolevulinic Acid Dehydratase (ALAD) Stability in Human Blood. July p. 315
Pulley, H.: Determination of Gaseous Fluorine in Air. Sept. p. 418

R

Ramanathan, N. L.: Physiological Evaluation of the WBGT Index for Occupational Heat Stress. Sept. p. 375
Ramsey, J. D.: Monitoring Performance as a Function of Work/Rest Schedule and Thermal Stress. Nov. p. 474
Ramsey, James M.: Effects of Single Exposures of Carbon Monoxide on Sensory and Psychomotor Response. May p. 212
Raymond, L. D.: Bureau of Mines Procedure for Analysis of Respirable Dust from Coal Mines. May p. 200
Richards, C. P.: Effect of Facial Hair on Respirator Performance. Apr. p. 135
Richey, Everett O.: Determination of Revised Air Force Permissible Exposure Levels for Laser Radiation. June p. 235
Rowland, Thomas J.: Respirator Cartridge Filter Efficency under Cylic- and Steady-Flow Conditions. May p. 182
Royer, G. W.: Effect of Humidity on the Aerodynamic Size Characteristics of Nonhygroscopic Aerosols. Oct. p. 440

S

Sansone, Eric B.: The Effect of Varying Inlet Geometry on the Collection Characteristics of a 10-Millimeter Nylon Cyclone. Oct. p. 421
Scala, R. A.: Acute Toxicity of a Homologous Series of Branch-Chained Primary Alcohols. Nov. p. 493
Scharf, Allan: Control of Airborne Dust Produced by Pneumatic Jackpicks with Water Attachments. Jan. p. 48
: Control of Airborne Dust Produced by Pneumatic Jackpicks: Report IV. Apr. p. 171
Schultz, Michael J.: Simplified Method for the Determination of Benzo(a)pyrene in Ambient Air. Sept. p. 404
Segall, Stanley: Gaseous Odorant Evaluation of a Hospital Clean Room. Aug. p. 367
Sidor, Reinhard: A Carbon Monoxide-Oxygen Sampler for Evaluation of Fire Fighter Exposures. June p. 264
Siebert, George W.: Exhaust Ventilation for Hot Processes. Nov. p. 481
Smith, William E.: Asbestos, Talc and Nitrites in Relation to Gastric Cancer. May p. 227
Solomon, R. A.: Investigation of the Formation of Bis-Chloromethyl Ether in Simulated Hydrogen Chloride-Formaldehyde Atmospheric Environments. Nov. p. 469
Stafford, Ronald G.: Respirator Cartridge Filter Efficiency under Cylic- and Steady-Flow Conditions. May p. 182
Stein, F.: Physical and Chemical Properties of Respirable Coal Dust from Two United States Mines. July p. 279
Stephens, Susan S.: Exposure of Japanese Quail and Parakeets to the Pyrolysis Products of Fry Pans Coated with Teflon and Commong Cooking Oils. Apr. p. 176
Suffet, Irwin H.: Gaseous Odorant Evaluation of a Hospital Clean Room. Aug. p. 367
Swartz, D. B.: On Calibration of Cascade Impactors. Oct. p. 429
Sweet, D. V.: Spectrophotometric Determination of Free Silica. Nov. p. 500

T

Tayrun, Figen O.: Exposure of Japanese Quail and Parakeets to the Pyrolysis Products of Fry Pans Coated with Teflon and Common Cooking Oils. Apr. p. 176
Taylor, C. D.: Bureau of Mines Procedure for Analysis of Respirable Dust from Coal Mines. May p. 200
Terhaar, C. J.: Dimethyl Terephthalate (DMT): Acute Toxicity, Subacute Feeding and Inhalation Studies in Male Rats. Oct. p. 455
Terrill, J. B.: Blood Levels of Fluorocarbon Related to Cardiac Sensitization. Mar. p. 102
Thomas, R. G.: In Vivo Solubility of Four Forms of Barium Determined by Scanning Techniques. Aug. p. 350
Thorsell Walborg: Determination of Trichloroacetic Acid in Urine by a Gas Chromatographic Method. Mar. p. 93
Tichauer, Erwin R.: Lordosimetry: A New Technique for the Measurement of Postural Response to Materials Handling. Jan. p. 1
Tillery, M. I.: Effect of Humidity on the Aerodynamic Size Characteristics of Nonhygroscopic Aerosols. Oct. p. 440
Toca, Frederick M.: Lead and Cadmium Distribution in the Particulate Effluent from Coal-Fired Boilers. Sept. p. 396
Tomb, Thomas F.: Comparison of Equivalent Sherical Volume and Aerodynamic Diameters for Irregularly Shaped Particles. Jan. p. 13
Trochimowicz, H. J.: Blood Levels of Fluorocarbon Related to Cardiac Sensitization. Mar. p. 102
Twiss, Suzanne: delta-Aminolevulinic Acid Dehydratase (ALAD) Stability in Human Blood. July. p. 315
Tyler, D. A.: Noise and the Truck Drivers. Aug. p. 345

W

Weiss, B.: Quantitative Differential Thermal Analysis of Small Dust Samples Containing Quartz. May p. 193.
Wheeler, D. D.: Caprolactam Vapor Exposures. Sept. p. 384
White, E. W.: Rapid New Soft X-Ray Technique for Determination of Quartz in Coal Mine Dusts. June p. 229
Wohlers, Henry C.: Gaseous Odorant Evaluation of a Hospital Clean Room. Aug. p. 367
Wolowicz, F. R.: Spectrophotometric Determination of Free Silica. Nov. p. 500
Woolrich, Paul F.: Occurrence of Trace Metals in the Environment—An Overview. May p. 217

Y

Yanno, F. J.: Exposure of Man and Dog to Low Concentrations of Acetone Vapors. Aug. p. 329
: Dimethyl Terephthalate (DMT): Acute Toxicity, Subacute Feeding and Inhalation Studies in Male Rats. Oct. p. 455
Yeager, David W.: The Determination of Cadmium in Biological and Related Material by Atomic Absorption. Oct. p. 450

Z

Zervins, A.: Chick Embryo Development in a 26-KHz Electromagnetic Field. Mar. p. 120.

Subject Index

A

abrasive blasting, protection from, 61
acetaldehyde, inhalation with acetone, 533
—inhalation with ammonia, 533
acetone, in blood, 329
—in breath, 329
—exposure to, 329, 533
—retention in dogs, 533
—in urine, 329
aerodynamic, diameters, 13
—size of aerosols, 440
aerosols, nonhygroscopic, 440
—size characteristics, 440
—spectrometer, 440
—of wax, 429
aircraft, noise from, 463
Air Force, laser standards, 235
air pollution, bacteria in, 164
—gas sampling, 159
—urban atmospheres, 164
alcohols, toxicity of, 493
alkyl mercury, detmn. of, 337
alpha-quartz, in particulates, 150
amino acids, analysis for, 163
aminolevulinic acid dehydratase in blood, 315
ammonia retention in dogs, 533
amyl alcohol, toxicity of, 493
antenna, microwave leaks, 97
asbestos, cancer from, 227
—determination of, 252, 507
—identification of, 252, 507
—in tissue, 507
atomic absorption, detmn. lead in urine, 310
—detmn. of cadmium, 450
audiometry, in hearing program, 82

B

back injuries, from lifting, 292, 513
bacteria, in urban atmosphere, 164
barium compounds, in vivo solubility, 350
beards, respirator fit with, 135
belt conveyors, dust from, 540
benzo(a)pyrene, detmn. in air, 404
biomechanics, of lifting, 513
bis-chloromethyl ether, see chloromethyl ether
blasting, abrasive, 61
blood, acetone in, 329
—aminolevulinic acid dehydratase in, 315
—cadmium in, 450
—esterase stability in, 360
—fluorocarbons in, 102
breath samples, for acetone, 329
Bureau of Mines, dust procedure, 200

C

cadmium, by atomic absorption, 450
—in biologic materials, 450
—in stack effluent, 396
calibration, cascade impactors, 429
cancer, gastric from minerals, 227
caprolactam, vapor exposure, 384
carbon monoxide, personal monitor, 264
—psychomotor response, 212
—single exposure, 212
carbon tetrachloride, decomposition of, 25, 73
—with phenobarbital, 487
carcinogens, identification of, 554
cardiac sensitivity, by fluorocarbons, 102
cascade impactors, calibration, 429
cartridges, for respirators, 55, 182
centrifuge, spiral aerosol spectrometer, 440
certification, industrial nurses, 158
charge, on filter samplers, 109
chick embryo, in electromagnetic field, 120
chlorine, from carbon tetrachloride, 73
—from thermal decomposition, 25, 73
chlorine dioxide, from thermal decomposition, 25, 73
chloroform, with phenobarbital, 487
chloromethyl ether, formation of, 47, 469
cholinesterase, in stored blood, 360
chromatography, detmn. mercury, 337
—detmn. phosphorus, 306
—detmn. trichloroacetic acid, 93
chromic oxide, in tissue, 507
chromium, in environment, 219
cleaning, abrasive blasting, 61
clearance, lung, 260
CME, see chloromethyl ether
coal dust, properties of, 279
—quartz in, 229
—respirable detmn. of, 200
—at transfer points, 540
—theory of generation, 540
coal-fired boilers, particulates from, 396
construction, health hazards in, 38
computer, identification of carcinogens, 554
conveyors, dust from, 540
cooking oils, pyrolysis of, 176
Coulter counter, particle sizing, 13
counting of particles, 429
cyclone, entry geometry, 421

D

decomposition, of carbon tetrachloride, 73
—of phosgene, 110
decyl alcohol, toxicity of, 493
delta-aminolevulinic acid dehydratase, in blood, 315
Delves cup, lead in urine by, 310
determination, alpha-quartz, 150
—asbestos, 252
—benzo(a)pyrene, 404
—cadmium, 450
—fluorine, 418
—free silica, 500
—lead in urine, 310
—phosphorus, 306
—quartz, 298
—trichloroacetic acid, 93
diameters, aerodynamic, 13
diesel engines, on construction work, 38
—nitrogen dioxide from, 38
differential thermal analysis, for quartz, 193
diffusion, gas monitor, 78
dimethyl terphthalate, toxicity of, 455
DMT, see dimethyl terephthalate
dust, from abrasive blasting, 61
—alpha-quartz in, 150
—analysis for quartz, 193
—in coal mines, 229
—in construction work, 38
—in granite sheds, 206
—gravimetric detmn., 200
—from pneumatic hammers, 47, 171
—respirable sampler, 421
—at transfer points, 540

E

ecology, zirconium in, 128
electrode-filters, for odor control, 367
electromagnetic fields, effects of, 120
electron microscopy, of particles, 507
equivalent volume, of particles, 13
ergonomics, of heat stress, 474
—of lifting, 292
—postural response, 1
—of work/rest, 474
esterase, stability in blood, 360
2-ethyl hexyl alcohol, toxicity of, 493
exhaust ventilation, of hot process, 481

F

facial hair, respirator fit with, 135
fatigue, and performance, 474
fiber, minerals, 252
filters, gravimetric sampling, 109
—for respirators, 182
—weight gain of, 109
flow rate, effects on sampling, 159
—through respirators, 182
fluorine, detmn. in air, 418
fluorocarbons, cardiac sensitization, 102
—levels in blood, 102
forges, ventilation of, 481
formaldehyde, forming chloromethyl ether, 469
free silica, detmn. of, 500
—also see quartz
—also see silica
furnace, ventilation of, 481

G

gas chromatography, for phosphorus, 306
—for trichloroacetic acid, 93
gases, in construction work, 38
—personal monitoring, 78
gas mask, canister identification, 143
gastric cancer, from minerals, 227
glycol dinitrates, toxicology of, 526
granite, dust from, 206, 298
gravimetric sampling, filter charge effect, 109

H

hair, respirator fit with, 135
hearing, conservation program, 82
hearing conservation, for mineral industry, 142
heat stress, measurement, 66
—WBGT index, 375
heat, ventilation problems, 481
hexyl alcohol, toxicity of, 493
hexadecyl alcohol, toxicity of, 493
hospital, clean room, 367
humidity, effect on aerosols, 440
—effects on particle size, 440
—in thermal decomposition, 25
hydroelectric, construction hazards, 38
hydrogen chloride, from carbon tetrachloride, 73
—forming chloromethyl ether, 469
—from thermal decomposition, 25
Hygienic Guide, titanium, 275

I

identification, of canisters, 143
—carcinogens, 554
—by computer, 554
—of hydrocarbons, 554
impactors, cascade, 429
induced vibration, aricraft noise, 463
inlet geometry, cyclone sampler, 421
infared, detmn. of quartz, 298
insecticides, use of, 320
isononyl alcohol, toxicity of, 493
isooctyl alcohol, toxicity of, 493

J

Japanese quail, effects pyrolysis products, 176

L

laser exposure levels, 235
—standards, 235
lead, ALAD in blood, 315
—detmn. in urine, 310
—in environment, 221
—in stack effluent, 396
lifting, back pains, 513
—biomechanics of, 513
—hazards of, 292
—postural response, 1
Lifting Strength Rating, method, 513
load, lifting of, 1, 513
lordosimetry, in materials handling, 1
lung clearance, of sulfur dioxide, 260
—of titanium dioxide, 260

M

manganese, in environment, 219
measurement, of heat stress, 66
melting pots, ventilation of, 481
mercury, in environment, 222
—by gas chromatography, 337
metals, trace, 217
meter, for heat stress, 66
methodology, silicosis evaluation, 409
methyl chloroform, with phenobarbital, 487
methyl mercury, detmn. of, 337
methylene chloride, with phenobarbital, 487
microscopy, electron, 507
microwaves, hazards of, 97
mine dust, quartz in, 229
mines, coal dust in, 200
molecular diffusion, monitor, 78
monitoring, carbon monoxide, 264
—exposure of firemen, 264
—for gases, 78
—for oxygen, 264
—of performance, 474

N

nickel oxide, in tissue, 507
nitrites, gastric cancer from, 227
nitrogen dioxide, from Diesel engines, 38
—sampling for, 390
noise, community, 241
—control design, 241
—hearing conservation, 82
—in construction, 38
—induced vibration from, 463
—in truck cabs, 345
noise levels, categories of, 82
nurses, certification of, 158

O

odors, in clean room, 367
oils, pyrolysis of, 176
organic vapors, respirators for, 55
ovens, ventilation of, 481

P

parakeets, effects of pyrolysis products, 176
particles, counting of, 429
—irregular, 13
—spherical volume, 13
particle size, by cascade impactor, 429
particulates, alpha-quartz in, 150
—in cells, 507
—from coal-fired boilers, 396
—by electron microscopy, 507
—identification of, 507
penetration, of filters, 182
perchloroethylene, with phenobarbital, 487
performance, factors affecting, 474
—monitoring of, 474
personal monitor, device, 78
personal sampler, for carbon monoxide, 264
—for oxygen, 264
pest control, in Texas, 320
pesticides, use of, 320
phenobarbital, with chlorinated hydrocarbons, 487
—potentiation by, 487
—with solvents, 487
Phillip Drinker, eulogy, 179
phosgene, from carbon tetrachloride, 73
—decomposition of, 110
—thermal decomposition, 25
phosphorus, detmn, of, 306
—by gas chromatography, 306
plutonium oxide, in tissue, 507
pneumatic picks, dust from, 171
pollution, in urban atmospheres, 164
polycyclic aromatic hydrocarbons, identification, 554
posture, in material handling, 1
posture response, measurement of, 1
potentiation, of toxicity, 487
pressure, effect on sampling, 159

propylene glycol dinitrate, toxicology of, 526
psychomotor, response to carbon monoxide, 212
pyrolysis, see thermal decomposition

Q

quartz, in coal dust, 200, 229
—differential thermal analysis, 193
—detmn. in dust, 229, 298
—detmn, by infrared, 298
—detmn. by x-ray, 229
—in granite dust, 298

R

radiation, laser standards, 235
—microwave, 97
—personal safety, 547
radiation source, shutter contol, 371
radioisotope, scanning technique, 350
regulations, of pesticides, 320
residences, vibration of, 463
respirable dust, alpha-quartz in, 150
—Bur. Mines analysis, 200
—in silicosis, 409
respirator, cartridge life, 55, 182
—cyclic flow through, 182
—filter efficiency, 182
—European standards, 143
—fit with beard, 135
—performance, 135
retention, of inhaled acetone, 533
—of inhaled ammonia, 533

S

safety, radiation standards, 547
sample concentration, technique for, 373
sampler, 10-mm cyclone, 421
sampling, air pollutants, 159
—factors affecting, 159
—for nitrogen dioxide, 390
—respirable dust, 279
—with triethanolamine, 390
scanning technique, radioisotope, 350
—solubility of barium compounds, 350
sensory response, carbon monoxide, 212
service life, respirator cartridges, 55, 182
shutter control, for radiation source, 371
silica, in abrasive blasting, 61
—detmn. by x-ray, 229
—free, 500
—also see quartz
silicosis, evaluation for, 409
silver membrane filters, use of, 409
size, of particles, 13
solubility, of barium compounds, 350
solvents, with phenobarbital, 487
—potentiation of, 487
spectrofluorimetry, for benzo(a)pyrene, 404
spectrophotometry, detmn. free silica, 500
—infrared, 298
spherical volume, aerodynamic diameters, 13
—of particles, 13
spiral centrifuge, spectrometer, 440
stack effluent, from coal-fired boilers, 396
standards, European, 143
—implementation of, 547
—laser exposure, 235
—radiation facilities, 547
—respirators, 143
Stokes diameter, of particles, 13
strength, in lifting, 513
sulfur dioxide, lung clearance of, 260
Summary Reports, gastric cancer, 227
—sample concentration, 373
—shutter control, 373
surface effects, on decomposition, 110

T

talc, gastric cancer from, 227
teflon, pyrolysis of, 176
temperature, effect on sampling, 159
terminal velocity, of particles, 13
testing, of respirators, 143
—of respirator cartridges, 55, 182
thermal, differential analysis, 193
thermal decomposition, of carbon tetrachloride, 25
—of cooking oils, 176
—of phosgene, 110
—of teflon, 176
thermal stress, effect on performance, 474—meter, 66
thin-layer chromatography, for benzo(a)pyrene, 404
—concentration of samples, 373
titanium, Hygienic Guide, 275
titanium dioxide, lung clearance of, 260
toxicity, branch chain alcohols, 493
—of caprolactam, 384
—of decomposition products, 73
—of dimethyl terephthalate, 455
—potentiation of, 487
—of pyrolysis products, 176
—of trimethyl phosphite, 286
—of zirconium, 128
toxicology, of triethylene glycol dinitrate, 526
—of propylene glycol dinitrate, 526
trace metals, dangers of, 217
transfer points, conveyor belt, 540
dust at, 540
trichloroacetic acid, determination of, 93
—in urine, 93
trichloroethylene, with phenobarbital, 487
tridecyl alcohol, toxicity of, 493
triethanolamine, sampling with, 390
trimethyl phosphite, toxicity of, 286
triethylene glycol dinitrate, toxicology of, 526
trucks, noise control in, 345

U

ultraviolet, identification of hydrocarbons, 554
urban, air pollution, 164
urine, lead in, 310
—trichloroacetic acid in, 93

V

vapors, thermal decomposition, 25
ventilation, of hot processes, 481
vibration, from aircraft noise, 463

W

WBGT index, evaluation of, 375
WBGT nomograph, 329
weight, lifting factors, 513
wet-bulb-globe-temperature, see WBGT
wet methods, dust control, 47, 171
work/rest, effect on performance, 474

X

x-ray, detmn of quartz, 229
—safety features, 547
x-ray diffraction, for alpha-quartz, 150

Z

zirconium, in ecology, 128